University of Toronto
Department of Biochemistry
Job Posting – Teaching Assistant Position
Fall Term 2021 (September-December)

Posted on: July 8, 2021

The Biochemistry Program seeks up to 1 Lab Teaching Assistants for the following course:

**BCH478H1F – Advanced Biochemistry Lab**

**Course description**
BCH478H is designed as an advanced successor in a progression of biochemistry laboratory experiences in BCH242Y1, BCH377H1, and BCH378H1, presenting students with a broad spectrum of techniques, approaches and concepts of contemporary biochemistry. For 2019 we are using CRISPR/Cas to construct a heterologous metabolic pathway in budding yeast. We will follow this with an assessment of anti-CRISPR activity in vivo. The synthetic biology will be complemented by an investigation of anti-CRISPR protein structure and function. Using state-of-the-art interaction methodologies (SPR, BLI, MST) we will analyze anti-CRISPR binding affinities. Protein crystallization, crystallization optimization, structure solving, model building, and refinement will be pursued.

**Qualifications**
We seek a graduate student with experience in Structural Biology, particularly with experience in protein crystallography, electron microscopy and/or biomolecular interactions methods including SPR, ITC, BLI or MST would be helpful.

**Relevant Criterion**
Previous experience is the more relevant criterion than the need to acquire experience in respect

**Duties**
TA will help prepare material for the lab including protein for crystallization trials and biomolecular interaction assays. TA will attend and advise students on procedures/methods in lab and demonstrate the proper techniques (ie hanging drop vapor diffusion for crystallography; use of software for biomolecular interactions - determininting binding constants; solving and visualizing structure with Phenix, Coot and Pymol). TA will aid in explaining data analysis software. TA will aid in marking final report and lab notebooks, and final exam.

*Duties of this position shall be performed at the campus on which the position is located. Where the duties are intended to be performed at another location, such other location will be specified in the posting.*

**Hours of work: approx. 55**

**Estimated Course Enrolment:** 16

**Rate of Pay:** SGS I/II - $46.70/hour (+4% vacation pay)

**Start Date of Appointment:** Oct. 15, 2021

**End Date of Appointment:** Dec. 15, 2021

**Application Process:** A general Application should be submitted online by **July 13, 2021 by 5pm.** Please consult Departmental Website for application instructions: http://biochemistry.utoronto.ca/about/hiring

The University strives to be an equitable and inclusive community, and proactively seeks to increase diversity among its community members. Our values regarding equity and diversity are linked with our unwavering commitment to excellence in the pursuit of our academic mission. The University is committed to the principles of the Accessibility for Ontarians with Disabilities Act (AODA). As such, we strive to make our recruitment, assessment and selection processes as accessible as possible and provide accommodations as required for applicants with disabilities. If you require any accommodations at any point during the application and hiring process, please contact uoft.careers@utoronto.ca. During employment, to request accommodation from the University, contact the supervisor or department chair and/or Health & Wellbeing Programs & Services at hwb@utoronto.ca. For more information about accommodations at U of T, please visit our Accommodation webpage.
The hiring criteria for Teaching Assistant positions are academic qualifications, the need to acquire experience, previous experience and previous satisfactory employment under the provisions of this Collective Agreement.

Candidates who are members of Indigenous, Black, racialized and LGBTQ2S+ communities, persons with disabilities, and other equity seeking groups are encouraged to apply, and their lived experience shall be taken into consideration as applicable to the position.

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ2S+ persons, and others who may contribute to the further diversification of ideas.

This job is posted in accordance with the CUPE 3902 Unit 1 Collective Agreement.

The position(s) posted above is (are) tentative, pending final course determinations and enrolments.

Positions posted here are open to Graduate Students in the School of Graduate Studies, Postdoctoral Fellows and Undergraduate Students in the University of Toronto.

Preference in hiring shall be given to Graduate Students enrolled in the School of Graduate Studies of the University of Toronto or those who have made application to be enrolled in the School of Graduate Studies of the University of Toronto.